

REMARKS/ARGUMENTS

Claims 28-31 and 38-42 are pending.

Claims 1-3, 5-7, 9-11, 15, 17, 19-23, 33, and 34 were rejected under 35 U.S.C. Section 102 for allegedly being anticipated by Yuasa et al. U.S. Pat. No. 6,085,283.

Claims 4, 8, 12-14, 16, 18, 24-30, 32, and 35-37 were rejected under 35 U.S.C. Section 103 for allegedly being obvious in view of Yuasa et al. and Gage et al. U.S. Pat. No. 6,035,405.

It is noted with appreciation that claim 31 is deemed to be allowable.

As to the rejected claims, aspects of the present invention include cryptography-based segregation of virtual LANs (VLANs) and the use of authentication codes to identify a VLAN. These aspects of the present invention are recited at least among claims 7, 8, 15-18, 29, 31, and 35-37. It is noted that the rejections of these claims is largely based on Yuasa et al. at column 45, lines 13-17 and on Gage et al. at column 2, lines 17-44.

However, Yuasa et al. at column 45, lines 13-17, as understood, is the simple observation that since internet routing is not based on VLAN-ID or local intranet IP addresses, then the address may be encapsulated and furthermore the resultant capsule may be encrypted for transmission. This does not constitute nor does it suggest cryptography-based separation of VLANs.

Gage et al. at column 2, lines 17-44 disclose the notion of an authentication server that keeps track of which end stations are members of which VLAN. The authentication server also keeps track of which end stations are authorized to join which VLAN and performs authentication of end stations joining a VLAN. There is no disclosure of using authentication codes to identify a VLAN.

Other aspects of the present invention are further recited among the remaining claims, and are believed to be distinguishable over the art of record. Nonetheless, in order to move forward with the prosecution of this application, Applicant will pursue the rejected claims in a continuing application. Accordingly, claims 1-26 and 33-37 have been canceled without prejudice or disclaimer.

Claim 31 has been re-written in independent form, and further amended to substitute "personal VLAN bridge" with "access point" in order to emphasize that the operations are performed by the access point. Claim 31 as amended more clearly points out that the security association is used to identify frames. It is nonetheless earnestly believed that claim 31 as amended remains allowable over the cited art. Claim 27 has been canceled without prejudice or disclaimer. Dependent claims 28-30 and 32 have been amended for proper dependency.

None of the references of record shows or suggests determining whether to forward a received frame or discard the received frame by first determining a preliminary virtual LAN ID (VID) and using the preliminary VID to index into a table of security associations to give an authentication code key, as substantially recited in originally-filed claim 31 and substantially recited in the appended claims.

The references do not show or teach computing an authentication code over a portion of the received frame using the authentication code key, and comparing the computed authentication code with a received authentication code contained in the received frame, as substantially recited in originally-filed claim 31, to make the determination as to how the received frame is to be handled.

In lieu of the canceled claims, claims 38-42 have been appended to recite those aspects of the present invention originally recited in claim 31 as filed. In view of the foregoing discussion, it is earnestly believed the appended claims read over the art of record.

Appl. No. 10/057,566
Amdt. dated January 9, 2006
Reply to Office Action of September 28, 2005

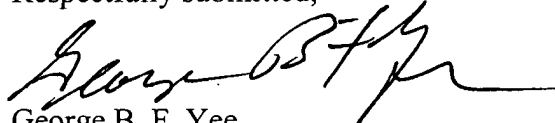
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CONCLUSION

All claims now pending in this Application are believed to in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

The Examiner is invited to call the undersigned at 650-324-6352, if a telephone conference would expedite prosecution of this application.

Respectfully submitted,


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